[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-3701; Directorate Identifier 2015-NM-015-AD; Amendment

39-18689; AD 2016-21-08]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2013-25-08 for all Airbus Model A330-200, -200 Freighter, and -300 series airplanes; and Model A340-200 and -300 series airplanes. AD 2013-25-08 required a repetitive inspection program on certain check valves in the hydraulic systems that includes, among other things, inspections for lock wire presence and integrity, traces of seepage or black deposits, proper torque, alignment of the check valve and manifold, installation of new lock wire, and corrective actions if needed. This new AD removes airplanes from the applicability, and requires modifying the green, blue, and yellow high pressure hydraulic manifolds by replacing certain check valves with improved check valves, which terminates the repetitive inspections required by this AD. This AD was prompted by multiple reports of hydraulic line check valves loosening. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of January 31, 2014 (78 FR 78694, December 27, 2013).

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of December 14, 2009 (74 FR 62208, November 27, 2009).

ADDRESSES: For service information identified in this final rule, contact Airbus SAS – Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3701.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3701; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2013-25-08, Amendment 39-17704 (78 FR 78694, December 27, 2013) ("AD 2013-25-08"). AD 2013-25-08 applied to all Airbus Model A330-200, -200 Freighter, and -300 series airplanes; and Model A340-200 and -300 series airplanes. The NPRM published in the Federal Register on February 25, 2016 (81 FR 9374) ("the NPRM"). The NPRM was prompted by multiple reports of hydraulic line check valves loosening. The NPRM proposed to continue to require a repetitive inspection program on certain check valves in the hydraulic systems that includes, among other things, inspections for lock wire presence and integrity, traces of seepage or black deposits, proper torque, alignment of the check valve and manifold, installation of new lock wire, and corrective actions if needed. The NPRM also proposed to add airplanes to the

applicability, and require modifying the green, blue, and yellow high pressure hydraulic manifolds by replacing certain check valves with improved check valves, which would terminate the repetitive inspections required by the proposed AD. We are issuing this AD to detect and correct hydraulic check valve loosening; loosened valves could result in hydraulic leaks, possibly leading to the loss of all three hydraulic systems and consequent loss of control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015-0009, dated January 16, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition. The MCAI states:

An A330 operator experienced a Yellow hydraulic circuit low level due to a loose check valve, Part Number (P/N) CAR401. During the inspection on the other two hydraulic systems, the other three check valves P/N CAR401 were also found to be loose with their lock wire broken in two instances. Airbus A340 aeroplanes are also equipped with P/N CAR401 high pressure manifold check valves.

Additional cases of P/N CAR401 check valve loosening have been reported on aeroplanes having accumulated more than 1,000 flight cycles (FC). The check valve fitted on the Yellow hydraulic system is more affected, due to additional system cycles induced by cargo door operation.

This condition, if not detected and corrected, could result in hydraulic leaks, possibly leading to the loss of all three hydraulic systems and consequent loss of control of the aeroplane.

To address this unsafe condition, EASA issued Emergency AD 2009-0223-E [which corresponds to FAA

AD 2009-24-09, Amendment 39-16068 (74 FR 62208, November 27, 2009)] to require an inspection programme to detect any check valve loosening and, if necessary, to apply the applicable corrective actions.

EASA AD 2010-0145, which superseded EASA EAD 2009-0223-E retaining its requirements, was issued to expand the applicability to the newly certified models A330-223F and A330-243F.

Prompted by further reported in-service events of check valve P/N CAR401 loosening before reaching the threshold of 700 FC, EASA AD 2011-0139, which superseded EASA AD 2010-0145, retaining its requirements, was issued to:

- extend the requirement to identify the P/N CAR401 check valves to all aeroplanes, and
- reduce the inspection threshold for aeroplanes fitted with check valve P/N CAR401, either installed in production through Airbus modification 54491, or installed in service through Airbus Service Bulletin (SB) A330-29-3101 or Airbus SB A340-29-4078.

EASA AD 2012-0070, which superseded EASA AD 2011-0139, retaining its requirements, was issued to require an increased torque value of the check valve tightening and High Pressure (HP) manifold reidentification.

Since EASA AD 2012-0070 was issued, additional in-service events have been reported on aeroplanes fitted with check valves on which the increased torque value had been applied. Based on those events, it has been concluded that the action to re-torque the check valves with an increased value is not a satisfactory terminating action for addressing the issue of those check valves.

To address that, EASA issued AD 2012-0244, which partially retained the requirements of EASA AD 2012-0070, which was superseded. Additionally, for aeroplanes equipped with P/N CAR401 on which the increased torque value had been applied, EASA AD 2012-0244 required repetitive inspections of the check valves and HP manifolds. Finally, EASA AD 2012-0244

also required application of a lower torque value when a check valve P/N CAR401 is installed on an aeroplane.

Note: The reporting and the torque value increase requirements for check valves P/N CAR401 of EASA AD 2012-0070 were no longer part of EASA AD 2012-0244.

EASA AD was revised to clarify which actions are required for P/N CAR401 check valves, depending on applied (or not) torque value.

Since EASA AD 2012-0244R1 was issued, Airbus developed an improved check valve P/N CAR402, which is embodied in production through Airbus modification 203972, and in service through associated Airbus SB A330-29-3125, or Airbus SB A340-29-4096, as applicable to aeroplane type. In addition, these SBs provide instructions about the torque value (between 230 and 250 Nm) and re-identification of HP manifolds after check valve P/N CAR402 installation.

For the reasons described above, this [EASA] AD retains the requirements of EASA AD 2012-0244R1, which is superseded, and requires the installation of check valves P/N CAR402 as terminating action to the repetitive inspections [and removes airplanes on which Airbus modification 203972 has been embodied from the applicability].

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3701.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA's response to the comment.

Support for the NPRM

American Airlines (AAL) stated that it operates 24 airplanes that will be affected by the NPRM, and that it agrees with the need to accomplish Airbus Service Bulletin A330-29-3125 on these airplanes.

Request to Reference Revised Service Information

AAL requested that we revise the NPRM to reference Airbus Service Bulletin A330-29-3125, Revision 02, including Appendixes 01 and 02, dated January 21, 2016. AAL pointed out that this revision includes several corrections in the Accomplishment Instructions.

We agree to reference the latest service information in this final rule. Since we issued the NPRM, Airbus has issued Airbus Service Bulletin A330-29-3125, Revision 03, including Appendixes 01 and 02, dated April 8, 2016; and Service Bulletin A340-29-4096, Revision 02, including Appendixes 01 and 02, dated April 8, 2016. This service information states that no additional work is required by these revisions for airplanes modified by any previous issue. We have revised paragraph (p) of this AD to reference this revised service information as appropriate sources of service information for accomplishing the actions required by that paragraph. We have also revised paragraph (s) of this AD by adding credit for actions required by paragraph (p) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A330-29-3125, Revision 02, including Appendixes 01 and 02, dated January 21, 2016; or Airbus Service Bulletin A330-29-3125, Revision 01, including Appendixes 01 and 02, dated July 30, 2015; or Airbus Service Bulletin A340-29-4096, Revision 01, including Appendixes 01 and 02, dated July 30, 2015; as applicable. Additionally, we have

reformatted paragraph (s) of this AD to improve readability; this change does not affect the intent or requirements of that paragraph.

Conclusion

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Airbus has issued Service Bulletin A330-29-3125, Revision 03, including Appendixes 01 and 02, dated April 8, 2016; and Service Bulletin A340-29-4096, Revision 02, including Appendixes 01 and 02, dated April 8, 2016. This service information describes procedures for modifying the green, blue, and yellow high pressure hydraulic manifolds by replacing each check valve having P/N CAR401 with an improved check valve having P/N CAR402. These documents are distinct since they apply to different airplane models. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 88 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

The actions required by AD 2013-25-08, and retained in this AD take about 10 work-hours per product, at an average labor rate of \$85 per work-hour. Based on these figures, the estimated cost of the actions that were required by AD 2013-25-08 is \$850 per product.

We also estimate that it would take about 32 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$239,360, or \$2,720 per product.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD. We have no way of determining the number of aircraft that might need these actions.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all available costs in our cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII,

Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- Is not a "significant rule" under the DOT Regulatory Policies and Procedures
 (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA

amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2013-25-08, Amendment 39-17704 (78 FR 78694, December 27, 2013), and adding the following new AD:

2016-21-08 Airbus: Amendment 39-18689; Docket No. FAA-2016-3701; Directorate Identifier 2015-NM-015-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2013-25-08, Amendment 39-17704 (78 FR 78694, December 27, 2013) ("AD 2013-25-08").

(c) Applicability

This AD applies to Airbus airplanes, certificated in any category, as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, all manufacturer serial numbers except those on which Airbus modification 203972 has been embodied in production.

(2) Model A340-211, -212, -213, -311, -312, and -313 airplanes, all manufacturer serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic power.

(e) Reason

This AD was prompted by multiple reports of hydraulic line check valves loosening. We are issuing this AD to detect and correct hydraulic check valve loosening; loosened valves could result in hydraulic leaks, possibly leading to the loss of all three hydraulic systems and consequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Inspections, with No Changes

This paragraph restates the requirements of paragraph (g) of AD 2013-25-08, with no changes. Except for Model A330-223F and A330-243F airplanes: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD.

(1) For airplanes that do not have Airbus Modification 54491 embodied in production, or Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 embodied in service: Within 100 flight cycles or 28 days after December 14, 2009 (the effective date of AD 2009-24-09, Amendment 39-16068 (74 FR 62208, November 27, 2009) ("AD 2009-24-09")), whichever occurs first, inspect the check valves on the blue, green, and yellow hydraulic systems to identify their part numbers (P/Ns), in accordance with the instructions of Airbus All Operators Telex

- (AOT) A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Accomplishment of the inspection required by paragraph (h) of this AD terminates the requirements of this paragraph.
- (i) If check valves having P/N CAR401 are installed on all three hydraulic systems, before further flight, do the actions specified in paragraph (g)(2)(i) of this AD. After accomplishing the actions required by paragraph (g)(2)(i) of this AD, do the actions specified in paragraphs (g)(2)(ii) and (g)(2)(iii) of this AD at the applicable compliance times specified in those paragraphs. Accomplishment of the inspection required by paragraph (i) of this AD terminates the requirements of this paragraph.
- (ii) If check valves having P/N CAR401 are not installed on all three hydraulic systems, no further action is required by this paragraph until any check valve having P/N CAR400 is replaced with a check valve having P/N CAR401. If any check valve having P/N CAR400 is replaced by a check valve having P/N CAR401, before further flight, do the inspection specified in paragraph (g)(1) of this AD to determine if all three hydraulic systems are equipped with check valves having P/N CAR401. Accomplishment of the inspection required by paragraph (h) of this AD terminates the requirements of this paragraph.
- (2) For airplanes on which Airbus Modification 54491 was embodied in production, or Airbus Service Bulletin A330-29-3101; or Airbus Service Bulletin A340-29-4078 was embodied in service, do the actions specified in paragraphs (g)(2)(i), (g)(2)(ii), and (g)(2)(iii) of this AD.

- (i) Except as required by paragraph (g)(1)(i) of this AD, at the applicable times specified in paragraphs (g)(2)(i)(A) and (g)(2)(i)(B) of this AD, as applicable: Do the inspection program (detailed inspection of the lock wire for presence and integrity, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) on yellow and blue high pressure manifolds, install new lock wires, and do all applicable corrective actions, in accordance with the instructions of paragraph 4.1.1 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Airbus Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Accomplishment of the inspection required by paragraph (h)(1) of this AD terminates the requirements of this paragraph.
- (A) For airplanes on which Airbus Modification 54491 has been embodied in production: At the later of the times specified in paragraphs $(g)(2)(i)(A)(\underline{1})$ and $(g)(2)(i)(A)(\underline{2})$ of this AD.
- (1) Before the accumulation of 1,000 total flight cycles since first flight but no earlier than the accumulation of 700 total flight cycles since first flight.
- (2) Within 100 flight cycles or 28 days after December 14, 2009 (the effective date of AD 2009-24-09), whichever occurs first.
- (B) For airplanes on which Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 was embodied in service: At the later of the times specified in paragraphs $(g)(2)(i)(B)(\underline{1})$ and $(g)(2)(i)(B)(\underline{2})$ of this AD.

- (1) Within 1,000 flight cycles since the embodiment of Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 but no earlier than 700 flight cycles after the embodiment of Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078.
- (2) Within 100 flight cycles or 28 days after December 14, 2009 (the effective date of AD 2009-24-09), whichever occurs first.
- (ii) Within 900 flight hours after accomplishment of paragraph (g)(2)(i) of this AD, do the inspection program (detailed inspection of the lock wire for presence and integrity, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) and install a new lock wire on the green high pressure manifold; and do an inspection (detailed inspection for traces of seepage or black deposits, and detailed inspection to determine alignment of the check valve and manifold) on the yellow and blue high pressure manifolds, and do all applicable corrective actions; in accordance with the instructions of paragraph 4.1.2 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Accomplishment of the inspection program required by paragraph (i) of this AD terminates the requirements of this paragraph.
- (iii) Within 900 flight hours after accomplishment of paragraph (g)(2)(ii) of this AD, and thereafter at intervals not to exceed 900 flight hours, do the inspection program (detailed inspection for traces of seepage or black deposits, and detailed inspection to

determine alignment of the check valve and manifold) on the green, yellow, and blue high pressure manifolds, and do all applicable corrective actions, in accordance with the instructions of paragraph 4.1.3 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Accomplishment of the inspection program required by paragraph (i) of this AD terminates the requirements of this paragraph.

(h) Retained Inspection, with No Changes

This paragraph restates the requirements of paragraph (h) of AD 2013-25-08, with no changes. For airplanes equipped with check valves having P/N CAR400; and for airplanes equipped with check valves having P/N CAR401, except for airplanes on which Airbus Modification 201384 has been embodied during production, or on which Airbus Service Bulletin A330-29-3119 (for Model A330-200, -200F, and -300 series airplanes) or Airbus Service Bulletin A340-29-4091 (for Model A340-200 and -300 series airplanes) has been embodied in service: Within 900 flight hours after January 31, 2014 (the effective date of AD 2013-25-08), inspect the check valves on the blue, green, and yellow hydraulic systems to identify their part numbers, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011 (for Model A340-200 and -300 series airplanes). Accomplishment of the

actions required by this paragraph terminates the requirements specified in paragraphs (g)(1) and (g)(1)(ii) of this AD.

- (1) If check valves having P/N CAR401 are installed on all three hydraulic systems: Before further flight, do the inspection program (detailed inspection for red mark presence and alignment integrity of the check valve and manifold, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) on yellow and blue high pressure manifolds, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011 (for Model A340-200 and -300 series airplanes). Accomplishment of the actions required by this paragraph terminates the requirements specified in paragraph (g)(2)(i) of this AD.
- (2) If check valves having P/N CAR401 are not installed on all three hydraulic systems, no further action is required by this paragraph until any check valve having P/N CAR400 is replaced with a check valve having P/N CAR401. If any check valve having P/N CAR400 is replaced by a check valve having P/N CAR401: Before further flight after such replacement, do the actions specified in paragraph (h) of this AD, to determine if all three hydraulic systems are equipped with check valves having P/N CAR401. If check valves having P/N CAR401 are installed on all three hydraulic systems: Before further flight, do the actions specified in paragraphs (h)(1) and (i) of this AD.

(i) Retained Repetitive Inspection Program and Corrective Actions, with No Changes

This paragraph restates the requirements of paragraph (i) of AD 2013-25-08, with no changes. Within 900 flight hours after accomplishment of paragraph (h)(1) of this AD, do the inspection program (detailed inspection for red mark presence and alignment integrity of the check valve and manifold, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) on the green, yellow, and blue system check valves, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Repeat the inspection program thereafter at intervals not to exceed 900 flight hours. Accomplishment of the actions required by this paragraph terminates the requirements specified in paragraphs (g)(1)(i), (g)(2)(ii), and (g)(2)(iii) of this AD.

(j) Retained Repetitive Inspection for Certain Airplanes, with No Changes

This paragraph restates the requirements of paragraph (j) of AD 2013-25-08, with no changes. For airplanes equipped with check valves having P/N CAR401 and on which Airbus Modification 201384 has been embodied during production, or on which Airbus Service Bulletin A330-29-3119 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Service Bulletin A340-29-4091 (for Model A340-200 and -300 series airplanes) has been embodied in service: Within 1,000 flight hours after January 31, 2014

(the effective date of AD 2013-25-08), do a general visual inspection of the green, yellow, and blue high pressure manifolds and check valves having P/N CAR401 for any sign of rotation of the check valve head, and for any signs of hydraulic fluid leakage or seepage (including black deposits), in accordance with the instructions of Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012. Repeat the inspection thereafter at interval not to exceed 900 flight hours.

(k) Retained Corrective Action for Certain Airplanes, with No Changes

This paragraph restates the requirements of paragraph (k) of AD 2013-25-08, with no changes. If, during any inspection required by paragraph (j) of this AD, any sign of rotation of the check valve head is found, or any sign of hydraulic fluid leakage or seepage (including black deposits) is found: Before further flight, do all applicable corrective actions, in accordance with the instructions of Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012.

(1) Retained Provisions Regarding Terminating Action, with No Changes

This paragraph restates the provisions of paragraph (l) of AD 2013-25-08, with no changes. Accomplishment of the corrective actions required by this AD does not constitute terminating action for the repetitive inspections required by this AD.

(m) Retained Replacement Check Valve Torque Value, with No Changes

This paragraph restates the requirements of paragraph (m) of AD 2013-25-08, with no changes. As of January 31, 2014 (the effective date of AD 2013-25-08), at each replacement of a check valve with a check valve having P/N CAR401, apply a torque of 141 to 143 newton meters (N.m) (103.98 to 105.45 pounds-foot (lbf.ft)) during installation.

(n) Retained Credit for Previous Actions, with No Changes

This paragraph restates the provisions of paragraph (n) of AD 2013-25-08, with no changes.

- (1) This paragraph provides credit for actions required by paragraph (g)(2)(i) of this AD, if those actions were performed before December 14, 2009 (the effective date of AD 2009-24-09), using the applicable service information specified in paragraphs (n)(1)(i) and (n)(1)(ii) of this AD.
- (i) Airbus AOT A330-29A3111, dated September 2, 2009 (for Model A330-200 and -300 series airplanes), which is not incorporated by reference in this AD.
- (ii) Airbus AOT A340-29A4086, dated September 2, 2009 (for Model A340-200 and -300 series airplanes), which is not incorporated by reference in this AD.
- (2) This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before January 31, 2014 (the effective date of AD 2013-25-08), using the applicable service information specified in paragraphs (n)(2)(i) through (n)(2)(iv) of this AD.
- (i) Airbus AOT A330-29A3111, dated September 2, 2009 (for Model A330-200 and -300 series airplanes), which is not incorporated by reference in this AD.
- (ii) Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes), which is incorporated by reference in this AD.
- (iii) Airbus AOT A340-29A4086, dated September 2, 2009 (for Model A340-200 and -300 series airplanes), which is not incorporated by reference in this AD.

(iv) Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes), which is incorporated by reference in this AD.

(o) Retained Provisions for Reporting, with No Changes

This paragraph restates the provisions of paragraph (o) of AD 2013-25-08, with no changes. Although the service information specified in paragraphs (o)(1) through (o)(5) of this AD specifies to submit certain information to the manufacturer, this AD does not include that requirement.

- (1) Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012.
- (2) Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011.
- (3) Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011.
 - (4) Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009.
 - (5) Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009.

(p) New Requirement of this AD: Modify Hydraulic Systems

Within 36 months after the effective date of this AD, modify the green, blue, and yellow high pressure hydraulic manifolds by replacing each check valve having P/N CAR401 with an improved check valve having P/N CAR402, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3125, Revision 03, including Appendixes 01 and 02, dated April 8, 2016; or Airbus Service Bulletin A340-29-4096, Revision 02, including Appendixes 01 and 02, dated April 8, 2016; as applicable.

(q) New Provision of this AD: Terminating Action for Repetitive Inspections

Modification of an airplane, as required by paragraph (p) of this AD, constitutes terminating action for the repetitive inspections required by this AD.

(r) New Requirement of this AD: Parts Installation Limitations

- (1) For an airplane that, as of the effective date of this AD, has a check valve having P/N CAR401 installed, after modification as required by paragraph (p) of this AD, no person may install a check valve having P/N CAR401, on that airplane.
- (2) For an airplane that does not have a check valve having P/N CAR401 installed, as of the effective date of this AD, no person may install a check valve having P/N CAR401, on that airplane.

(s) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (p) of this AD, if those actions were performed before the effective date of this AD using the applicable service information specified in paragraphs (s)(1) through (s)(5) of this AD, which are not incorporated by reference in this AD.

- (1) Airbus Service Bulletin A330-29-3125, dated August 8, 2014.
- (2) Airbus Service Bulletin A330-29-3125, Revision 01, including Appendixes 01 and 02, dated July 30, 2015.
- (3) Airbus Service Bulletin A330-29-3125, Revision 02, including Appendixes 01 and 02, dated January 21, 2016.
 - (4) Airbus Service Bulletin A340-29-4096, dated August 8, 2014.
 - (5) Airbus Service Bulletin A340-29-4096, Revision 01, including Appendixes 01

and 02, dated July 30, 2015.

(t) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.
- (i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (ii) AMOC ANM-116-14-180 R1, dated February 21, 2014, is approved as an AMOC for the corresponding provisions of this AD.
- (iii) AMOC ANM-116-14-429, dated September 25, 2014, is not approved as an AMOC for the corresponding provisions of this AD.
- (2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch,

ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(u) Related Information

- (1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0009, dated January 16, 2015, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3701.
- (2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (v)(6) and (v)(7) of this AD.

(v) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
- (3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
- (i) Airbus Service Bulletin A330-29-3125, Revision 03, including Appendixes 01 and 02, dated April 8, 2016.
- (ii) Airbus Service Bulletin A340-29-4096, Revision 02, including Appendixes 01 and 02, dated April 8, 2016.
- (4) The following service information was approved for IBR on January 31, 2014 (78 FR 78694, December 27, 2013).
 - (i) Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012.
- (ii) Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011.
- (iii) Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23,2011.
- (5) The following service information was approved for IBR on December 14, 2009 (74 FR 62208, November 27, 2009).

- (i) Airbus Alert Operators Telex A330-29A3111, Revision 1, dated October 8, 2009. Only the first page of this document contains the document number, revision level, and date; no other pages of this document contain this information.
- (ii) Airbus Alert Operators Telex A340-29A4086, Revision 1, dated October 8, 2009. Only the first page of this document contains the document number, revision level, and date; no other pages of this document contain this information.
- (6) For service information identified in this AD, contact Airbus SAS Airworthiness Office EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com.
- (7) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(8) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Michael Kaszycki, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

Issued in Renton, Washington, on October 12, 2016.

[FR Doc. 2016-25745 Filed: 11/21/2016 8:45 am; Publication Date: 11/22/2016]